

LETTER REPORT
FOR

CHICAGO INDUSTRIAL WASTE HAULERS ALSIP, COOK COUNTY, ILLINOIS

U.S. EPA ID: ILD981538689 SSID: FB

TDD: T05-9106-017 PAN: FIL0744RAA

9/15/92

September 15, 1992

Prepared by	: Michelle L. Saster	Date:_	9/15/92	
Reviewed by	: Sally of Dones	Date:_	9/15/92	
Approved by	Cathery 200	— Date:	9/15/92	



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September 15, 1992

Mr. Duane Heaton, Deputy Project Officer U.S. Environmental Protection Agency Emergency Response Section 77 West Jackson Blvd. 5th Floor Chicago, Illinois 60604

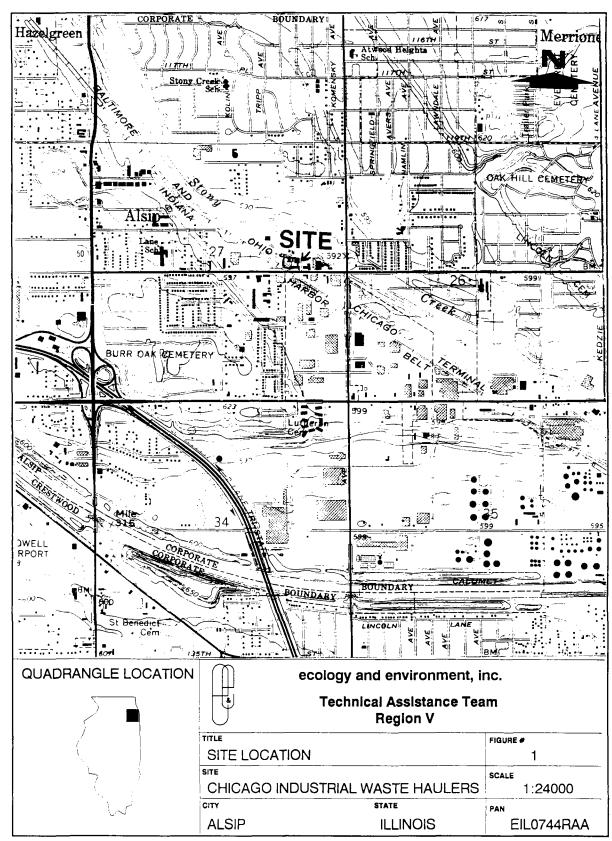
Re: Chicago Industrial Waste Haulers Site Alsip, Illinois TDD# T05-9106-017 PAN# EIL0744RAA

Dear Mr. Heaton:

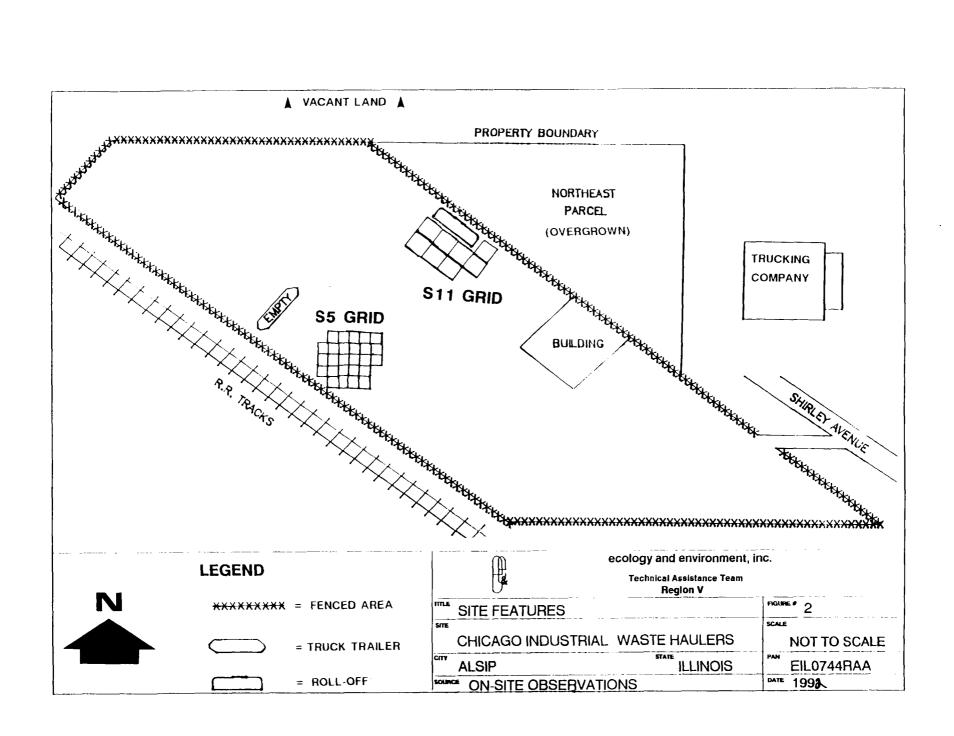
The Ecology and Environment, Inc. (E & E) Technical Assistance Team (TAT) was tasked by the United States Environmental Protection Agency (U.S. EPA) under TDD# T05-9106-017 to provide technical support and confirmation sampling at the Chicago Industrial Waste Haulers (CIWH) site, Alsip, Cook County, Illinois (see Figure 1 for site location). TAT prepared a sampling plan and on July 8, 1991, collected nine surface soil samples for polychlorinated biphenyl (PCB) analysis. PCB concentrations greater than the U.S. EPA OSC-recommended limit of 20 parts per million (ppm) were detected at two areas on-site. After reviewing a revised PRP workplan, TAT was tasked to oversee soil excavation and subsequent sampling in December 1991. Analytical results from this sampling event indicated further contamination, and TAT was tasked to oversee additional soil excavation in February 1992. In March 1992, TAT conducted final confirmation sampling at the CIWH site.

BACKGROUND

The CIWH site is an abandoned waste oil storage facility covering approximately 6 acres of land at 4206 Shirley Lane in Alsip. Illinois. The site is relatively flat with gravelly surface soils and oreignoun with regetation. The only structures remaining on-site include an empty warehouse building, an empty truck trailer, and an abandoned "roll-off" type of large container. The site is located in a mixed industrial and residential area and is completely fenced with the exception of a parcel of overgrown land northeast of the fenced lot (see Figure 2 for site features). A section of railroad tracks and a light metal manufacturing facility border the site on the southwest and the south, respectively. The east side of the site is bordered by Shirley Avenue and a trucking company, and the north side by vacant land. A playground and a residential area lie approximately 200 feet north of the site on the other side of a small intermittent stream named Stoney Creek.



SOURCE: USGS TOPOGRAPHIC MAP, BLUE ISLAND, IL QUADRANGLE, 1963, PHOTOREVISED 1973



Operations began at the site around 1950 when Chicago Tank Cleaners, Inc. (CTC) utilized the property for the storage of waste materials derived during the cleaning of industrial petroleum tanks. CTC changed its name to CIWH in 1986 and began storing a variety of waste materials on-site including slop oil emulsion solids, waste oil-water mixtures, waste oil/solvent mix, ignitable hazardous waste materials, tank bottoms, number six oils, lube oils, and PCB-containing oils. The company discontinued operations at the site later that same year, and the site has remained inactive since. The site is currently under the control of Pollution Control Industries of America (PCIA). (Woodward-Clyde 1990)

A Spill Prevention Control and Countermeasure (SPCC) inspection at the CIWH site in early March 1989 first brought the site to the U.S. EPA's attention. A site assessment conducted later that month by the U.S. EPA and TAT documented the presence of 24 above-ground storage tanks with PCB and flammable labels and numerous unlabelled drums on-site. An U.S. EPA removal action completed in June 1989 consisted of the pumping and disposal of all the liquid hazardous wastes in the on-site storage tanks. (Woodward-Clyde 1990)

In April 1989, the U.S. EPA issued an unilateral Administrative Order (AO) to the site PRP requesting that PCIA assume responsibility for the remaining clean-up activities required at the site. In response to the AO, various wastes and waste storage vessels were shipped off-site for disposal during 1989 and 1990. In addition, the AO required that the extent of contamination in on-site soils be assessed in a comprehensive site investigation. PCIA arranged for various subcontractors to establish and layout a sampling grid consisting of 105 sampling points. In July 1990, surface samples were collected at each point on the grid and analyzed for PCBs. A total of 31 samples contained detectable concentrations of PCBs ranging from 1.2 ppm to 32 ppm. TAT was tasked to conduct confirmation sampling in an effort to verify the PCB concentrations in on-site surface soils reported by the PRP. (Woodward-Clyde 1990)

On July 8, 1991, TAT collected nine surface soil confirmation samples at the CIWH site. Sampling locations were based on the PCB quantities reported in the PRP's extent of contamination study. Analytical results indicated PCB contamination at levels greater than the U.S. EPA-recommended limit of 20 ppm in two on-site areas. These areas contained Aroclor 1248 and 1260 at concentrations up to 50 ppm and 120 ppm respectively (E & E, 1991). On October 23, 1991, the PRP submitted a revised workplan for the excavation and subsequent sampling of these two contaminated areas. On December 16, 1991, TAT oversaw the excavation of one of the two contaminated areas (S5). See Figure 2 for grid locations. TAT collected samples from the excavated grid area, as well as from four areas not previously sampled. Analytical results indicated total PCBs of 41.1 and 446.6 ppm in two grid samples after excavation. In addition, a total PCB level of 80.3 ppm was detected in one of the areas not previously sampled (E & E, 1992). The PRP submitted a revised workplan, and additional excavation activities were scheduled for February 14, 1992. These activities were to include all three areas indicating PCB contamination at levels greater than the U. S. EPA-recommended limit.

SITE ACTIVITIES

On Friday, February 14, 1992, TAT member (TATM) Nick Rombakis met OSC Zintak on-site at O800 hours. PCIA representative Chuck Smith was already present, along with a number of PCIA subcontractors. Terry Sullivan of Woodward Clyde Consultants, Inc. (WCC) had been subcontracted to collect the PRP's samples. The workplan for the day's activities included the following: additional excavation in the S5 grid; initial excavation in the S11 grid (which included both the S4 and the S11 areas); and prescreening composite sampling after excavation in both of the grids.

At 0830 hours, an additional six inches of surface soil was scraped from the S5 grid, for a total excavated depth of twelve inches. Sullivan gridded out the area of concern at S11, and excavation activities began in that location at 0920 hours. Six inches of surface soil was scraped from the S11 grid. At 1040 hours, Sullivan began collecting surface soil composite samples from both gridded areas. Three samples were collected from each grid for analysis at PCIA over the weekend. If analytical results indicated the presence of PCBs above the U.S. EPA-recommended clean-up limits, further excavation would be conducted the following Monday. PCIA would continue screening samples after each excavation until analytical results indicated that all samples met the U.S. EPA-recommended clean-up levels. At that time, TAT and WCC would split a complete set of grid samples to be analyzed by independent laboratories for confirmation analysis. Excavated soil from the grids was left on-site and covered with visqueen pending analytical results. All personnel departed site at 1240 hours.

At 0800 hours on Monday, February 17, 1992, TATM Rombakis met Smith and Sullivan on-site. On-site activities focused on loading the soil excavated on 2/14/92 into dump trucks for transport to the disposal facility. All trucks were lined with visqueen prior to loading, weighed after loading, and then covered with visqueen and a heavy tarp. Nine trucks from Will's Trucking were dispatched to Envirosafe Industries, Inc. (ESII) in Grandview, Idaho. At 1320 hours, Sullivan received analytical results from PCIA indicating additional PCB contamination in the S5 grid. Arrangements were made for additional excavation in this grid on Friday, February 21, 1992. Sullivan collected additional composite soil samples from both grids for analysis at PCIA. All personnel left site at 1600 hours.

At 0800 hours on Friday, February 21, 1992, TATM Rombakis met Smith and Sullivan on-site to oversee additional excavation activities in the S5 grid. PCIA analytical results had indicated PCB levels of 99 ppm in the center of the grid, and 23 and 27 ppm in the surrounding areas. Approximately one foot of soil was excavated from the center of the grid, and six inches from the areas surrounding it. The excavated soil was immediately transported off-site in two dump trucks to ESII. Sullivan collected samples for prescreening analysis at PCIA, and departed site at 1030 hours. TATM Rombakis departed site at 1100 hours.

At 0800 hours on Friday, February 28, 1992, TATM Rombakis met Smith and Sullivan on-site to oversee additional excavation activities in the center of the S5 grid. One dump truck of soil was transported to ESI for disposal, and Sullivan collected prescreening samples for PCIA. All personnel departed site at 0945 hours.

On Thursday, March 11, 1992, Sullivan contacted TAT and OSC Zintak. All of the prescreening samples analyzed by PCIA had indicated PCB levels below the recommended clean-up limit. The workplan was revised, and all parties agreed to meet on-site on Friday, March 20, 1992, in order to split a complete set of grid samples for confirmatory independent laboratory analysis.

hours on 3/20/92. Sullivan roped off the excavated areas into sampling grids, while TATM Zakutansky and OSC Zintak collected composite soil samples from three on-site areas not previously sampled by TAT. See Figure 3 for sample locations. Samples were collected using a stainless steel trowel and mixing bowl. Sample material was excavated from holes 3-6 inches deep. All three composite samples were prepared by throughly mixing sample material from three different grab samples in the same bowl. The material was then evenly split between WCC's and TAT's jars. All sampling equipment was decontaminated between sampling locations with an Alconox and distilled water solution and tripled rinsed with distilled water. WCC's samples were given to Sullivan following decontamination of the sample jars. All decontamination water was left on-site in the sampled areas with the prior permission of Sullivan and Smith.

The samples from both gridded areas were collected by Sullivan and split evenly between WCC and TAT. Sample collection and decontamination procedures were identical to those methods utilized by TAT to collect the new area samples. The S5 and S11 grid areas were subdivided into eight and nine sampling areas, respectively. TAT's splits were shipped to Ecology and Environment Analytical Services Center, Cheektowaga, New York, for PCB analysis. WCC's splits were analyzed by EMT Laboratory of Morton Grove, Illinois, for PCBs. All samples were analyzed for the following PCBs: Aroclor 1016, 1221, 1232, 1242, 1248, 1254, and 1260. Analytical results for TAT's splits are presented in Table 1, and the laboratory data package can be found in Appendix B.

SAMPLING RESULTS

Analytical results of both TAT's and WCC's splits indicated that no areas in either grid (S5 and S11) contained PCB levels above the U.S. EPA-recommended level of 20 ppm. In addition, none of the three previously unsampled areas contained PCB levels above the recommended limit. While Aroclor 1242, 1254, and 1260 were detected in some of the areas sampled (both grid and new areas), no total PCB levels above 20 ppm were detected in any area.

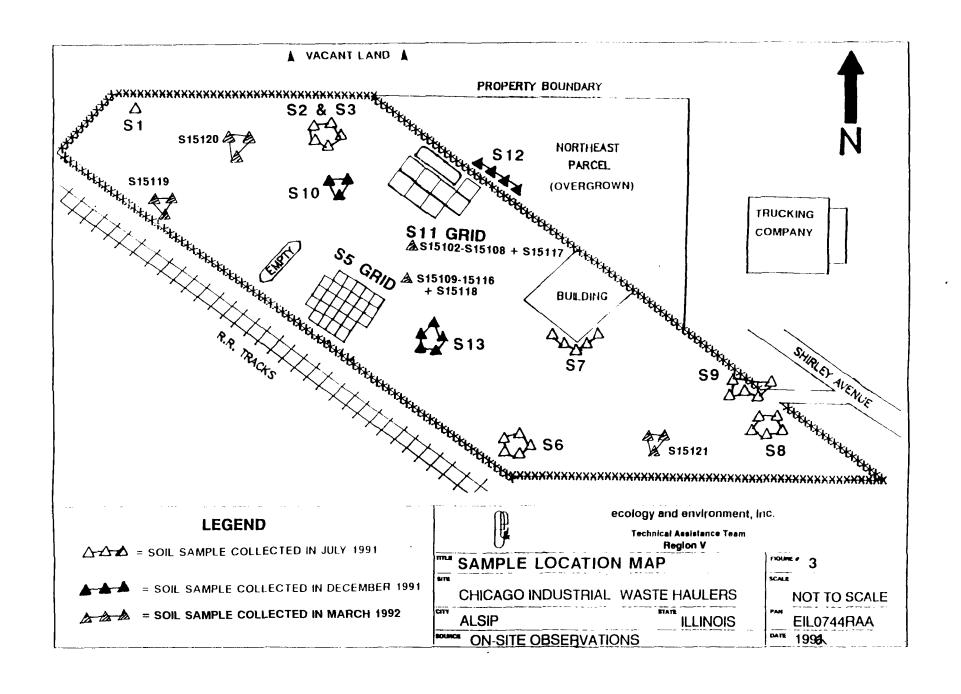


TABLE 1

Polychlorinated Biphenyl Concentrations (ug/g)
for Composite Soil Samples
Chicago Industrial Waste Haulers -- Alsip, Illinois

Sample ID	Aroclor 1242	Aroclor 1254	Aroclor 1260
S5 GRID:			
S15102	ND	ND	ND
S15103	ND	ND	6.6
S15104	ND	ND	ND
S15105	ND	ND	1.5
S15106	ND	ND	2.6
S15107	ND	ND	ND
S15108	ND	4.5	ND
S15117	ND	ND	ND
(dupe of S	515104)		
S11 GRID:			
S15109	1.2	4.5	ND
S15110	ND	ND	1.7
S15111	ND	ND	ND
S15112	ND	ND	0.47
S15113	ND	ND	2.0
S15114	3.0	3.2	ND
S15115	0.72	ND	2.8
S15116	ND	ND	1.6
S15118	ND	ND	1.8
NEW AREAS:			
S15119	ND	11.0	ND
S15120	ND	0.31	ND
S15121	ND	ND	2.2

NOTE: All values reported in ug/g (ppm).

FINAL ACTIONS

On August 4, 1992, TAT prepared and distributed a final POLREP for the CIWH site. On August 13, 1992, the OSC and TAT received a Final PRP Report prepared by WCC for PCIA. Following review of the WCC report, TAT submitted a memorandum to the OSC detailing minor concerns. In addition, OSC appendices were organized and entered into the site file.

Should you have any comments or questions, please feel free to contact this office.

Sincerely,

Michelle L. Jaster

Michelle L. Juter

TAT Member

cc: Len Zintak, OSC, U.S. EPA Tom Kouris, TATL, E & E

- E & E, 1991, Letter Report for Chicago Industrial Waste Haulers site, prepared by Michelle Jaster.
- E & E, 1992, Letter Report for Chicago Industrial Waste Haulers site, prepared by Michelle Jaster.

Woodward-Clyde Consultants, 1990, <u>Site Investigation and Characterization for the Chicago Industrial Waste Haulers Site</u>, prepared for Pollution Control Industries of America.

APPENDIX A: SITE PHOTOGRAPHS

SITE NAME: Chicago Industrial Waste Haulers

PAGE 1 OF 5

U.S. EPA ID: ILD981538689

TDD: T05-9106-017

PAN: EILO744RAA

DATE: 2/14/92

TIME: 0935

DIRECTION OF PHOTOGRAPH: Southeast

WEATHER CONDITIONS: Mostly Cloudy Lower 30's

PHOTOGRAPHED BY: N. Rombakis

SAMPLE ID (if applicable): NA

DESCRIPTION: Pile of soil excavated from grid S5. Pile was stored on-site until following Monday.

DATE: 2/14/92

TIME: 1040

DIRECTION OF PHOTOGRAPH: West

WEATHER CONDITIONS: Mostly Cloudy Lower 30's

PHOTOGRAPHED BY: N. Rombakis

SAMPLE ID (if applicable): NA



DESCRIPTION: WCC collecting prescreening samples at grid S5 following excavation activities.

SITE NAME: Chicago Industrial Waste Haulers

PAGE 2 OF 5

U.S. EPA ID: ILD981538689

TDD: T05-9106-017

PAN: EILO744RAA

DATE: 2/14/92

TIME: 1130

DIRECTION OF PHOTOGRAPH: Northwest

WEATHER
CONDITIONS:
Mostly Cloudy
Lower 30's

PHOTOGRAPHED BY: N. Rombakis

SAMPLE ID (if applicable): N/A



DESCRIPTION: Excavated soil covered and stored at grid S5 over weekend.

DATE: 2/21/92

TIME: 0930

DIRECTION OF PHOTOGRAPH: Northwest

WEATHER CONDITIONS: Mostly Cloudy Upper 20's

PHOTOGRAPHED BY: N. Rombakis

SAMPLE ID (if applicable): N/A



DESCRIPTION: Additional excavation in S5 grid area. (Note that date on photo is incorrect).

SITE NAME: Chicago Industrial Waste Haulers

PAGE 3 OF 5

U.S. EPA ID: ILD981538689

TDD: T05-9106-017

PAN: EILO744RAA

DATE: 2/14/92

TIME: 0900

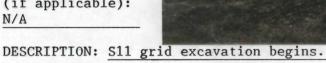
DIRECTION OF PHOTOGRAPH:

East

WEATHER CONDITIONS: Mostly Cloudy Lower 30's

PHOTOGRAPHED BY: N. Rombakis

SAMPLE ID (if applicable): N/A



DATE: 2/14/92

TIME: 0930

DIRECTION OF PHOTOGRAPH:

N/NE

WEATHER CONDITIONS: Mostly Cloudy Lower 30's

PHOTOGRAPHED BY: N. Rombakis

SAMPLE ID (if applicable): N/A

DESCRIPTION: Soil excavated from grid S11 and piled for weekend storage.



SITE NAME: Chicago Industrial Waste Haulers

PAGE 4 OF 5

U.S. EPA ID: ILD981538689

TDD: T05-9106-017

PAN: EILO744RAA

DATE: 2/14/92

TIME: 1040

DIRECTION OF PHOTOGRAPH: North

WEATHER CONDITIONS: Mostly Cloudy Lower 30's

PHOTOGRAPHED BY: N. Rombakis

SAMPLE ID (if applicable): N/A

© HITACHI.

DESCRIPTION: Excavated soil from grid S11 covered for weekend storage.

DATE: 2/14/92

TIME: 1130

DIRECTION OF PHOTOGRAPH:

N/NE

WEATHER CONDITIONS: Mostly Cloudy Lower 30's

PHOTOGRAPHED BY: N. Rombakis

SAMPLE ID (if applicable): N/A

DESCRIPTION: Grid S11 after excavation activities.

SITE NAME: Chicago Industrial Waste Haulers

PAGE 5 OF 5

U.S. EPA ID: ILD981538689

TDD: T05-9106-017

PAN: EILO744RAA

DATE: 3/20/92

TIME: 0930

DIRECTION OF PHOTOGRAPH: Northwest

WEATHER CONDITIONS: Mostly Cloudy Upper 40's

PHOTOGRAPHED BY: J. Zakutansky

SAMPLE ID (if applicable): N/A

DESCRIPTION: WCC collecting confirmatory split samples in grid S5.

DATE: 3/20/92

TIME: 1000

DIRECTION OF PHOTOGRAPH: North

WEATHER CONDITIONS: Mostly Cloudy Upper 40's

PHOTOGRAPHED BY: J. Zakutansky

SAMPLE ID (if applicable): N/A



DESCRIPTION: WCC collecting confirmatory split samples in grid S11.

APPENDIX B: LABORATORY DATA PACKAGE



ecology and environment, inc.

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MEMORANDUM

DATE: April 8, 1992

TO: Nick Rombakis, Project Manager, E & E, Chicago, IL

FROM: Jane G. Malkin, TAT-Chemist, E & E, Chicago, IL &m

SUBJ: PCB Data Quality Assurance Review, Chicago Industrial Waste

Haulers (CIWH), Alsip, IL

REF: Analytical TDD: T05-9202-805 Project TDD: T05-9106-017

Analytical PAN: EILO744ACA Project PAN: EILO744RAA

The data quality assurance review of 20 soil samples collected from the CIWH site in Alsip, Illinois has been completed. Analysis for polychlorinated biphenyl (PCB) by EPA method 8080 was performed by Ecology & Environment, Inc., Analytical Service Center, Cheektowaga, New York.

The 20 soil samples were numbered: 15102 through 15121.

Data Qualifications:

I. Holding Time: Acceptable

The samples were collected on March 20, 1992, extracted on March 26, 1992 and analyzed by March 30, 1992. This met the holding time requirement for extraction of 7 days and analysis within 40 days from date of extraction for soil PCB samples.

II. Calibration: Acceptable

A. Initial Calibration: Acceptable

A 5-point calibration was performed on the instrument before the analysis. All the percent relative standard deviations (%RSD) of calibration factors for arochlor 1254, arochlor 1242, arochlor 1260, and arochlor 1248 were all within the prescribed control limits of less than 20%.

B. Continuing Calibration: Acceptable

Continuing calibrations were performed on the same date as the analysis. The established quality control criterion for the percent

difference (%D) between the initial calibration factor and the continuing calibration factor is less than 15%. All the %D for the continuing calibration were all within the control limits.

III. Matrix Spike/Matrix Spike Duplicates: Acceptable

The lab spiked sample number 15118. The percent recoveries of matrix spike and matrix spike duplicate were all within the control limits.

The relative percent difference (RPD) between the recoveries were all within the control limits.

IV. Blanks: Acceptable

Results of the method blank samples were all below instrument detection limits.

V. Surrogate Recoveries:

The surrogate spikes in samples 15102 through 15110, 15113, 15117 through 15119 and 15121 were diluted out and the recoveries were not calculated. The surrogate recoveries for sample numbers 15114 through 15116 were not available because of matrix interference. No action was taken.

The percent surrogate recoveries for sample numbers 1511, 15112, and 15120 were all within the control limits.

VI. Overall Assessment of Data for Use

The overall usefulness of the data is based on the criteria outlined in "Quality Assurance/Quality Control Guidance for Removal Activities" (April 1990). Based upon the information provided, the data are acceptable for use with the above-stated data qualifications.

Ecology and Environment, Inc. Analytical Services Center

: TAT- CHICAGO CLIENT

%SOLIDS : 94 % RESULTS IN DRY WEIGHT TEST NAME : PCB-SOIL UNITS : MG/KG SAMPLE ID LAB : EE-92-35899 MATRIX : SOLID

SAMPLE ID CLIENT: 15102

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		_	
PCB-1016	ND	С	3.2
PCB-1242	ND	C	3.2
PCB-1254	ND	C	3.2
PCB-1221	ND	C	3.2
PCB-1232	ND	C	3.2
PCB-1248	ND	С	3.2
PCB-1260	ND	С	3.2

QUALIFIERS: C = COMMENT DETECTED DETEC

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

%SOLIDS : 88 % RESULTS IN DRY WEIGHT TEST NAME : PCB-SOIL UNITS : MG/KG SAMPLE ID LAB : EE-92-35900 MATRIX : SOLID

SAMPLE ID CLIENT: 15103

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		_	
PCB-1016	ND		1.1
PCB-1242	ND		1.1
PCB-1254	ND		1.1
PCB-1221	ND		1.1
PCB-1232	ND		1.1
PCB-1248	ND		1.1
PCB-1260	6.6		1.1

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

RESULTS IN DRY WEIGHT %SOLIDS : 90 % TEST NAME : PCB-SOIL UNITS : MG/KG SAMPLE ID LAB : EE-92-35901 MATRIX : SOLID

SAMPLE ID CLIENT: 15104

SAMPLE LOCATION :

PARAMETER	RESULTS	Q	QNT. LIMIT
		-	
PCB-1016	ND	C	4.4
PCB-1242	ND	С	4.4
PCB-1254	ND	С	4.4
PCB-1221	ND	C	4.4
PCB-1232	ND	С	4.4
PCB-1248	ND	С	4.4
PCB-1260	ND	C	4.4

QUALIFIERS: C = COMMENT DETECTED DETEC

Ecology and Environment, Inc. Analytical Services Center

: TAT- CHICAGO CLIENT

RESULTS IN DRY WEIGHT %SOLIDS: 88 % TEST NAME : PCB-SOIL UNITS : MG/KG SAMPLE ID LAB : EE-92-35902 MATRIX : SOLID

SAMPLE ID CLIENT: 15105

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		-	
PCB-1016	ND		0.57
PCB-1242	ND		0.57
PCB-1254	ND		0.57
PCB-1221	ND		0.57
PCB-1232	ND		0.57
PCB-1248	ND		0.57
PCB-1260	1.5		0.57

QUALIFIERS: C = COMMENT ND = NOT DETECTED J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

RESULTS IN DRY WEIGHT %SOLIDS : 89 % TEST NAME : PCB-SOIL UNITS : MG/KG MATRIX : SOLID SAMPLE ID LAB : EE-92-35903

SAMPLE ID CLIENT: 15106

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT.	LIMIT
		-	~	
PCB-1016	ND			1.1
PCB-1242	ND			1.1
PCB-1254	ND			1.1
PCB-1221	ND			1.1
PCB-1232	ND			1.1
PCB-1248	ND			1.1
PCB-1260	2.6			1.1

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

RESULTS IN DRY WEIGHT %SOLIDS : 82 % TEST NAME : PCB-SOIL UNITS : MG/KG MATRIX : SOLID SAMPLE ID LAB : EE-92-35904

SAMPLE ID CLIENT: 15107

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		_	
PCB-1016	ND	C	0.61
PCB-1242	ND	С	0.61
PCB-1254	ND	С	0.61
PCB-1221	ND	С	0.61
PCB-1232	ND	С	0.61
PCB-1248	ND	С	0.61
PCB-1260	ND	C	0.61

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

%SOLIDS : 94 % RESULTS IN DRY WEIGHT UNITS : MG/KG TEST NAME : PCB-SOIL SAMPLE ID LAB : EE-92-35905 MATRIX : SOLID

SAMPLE ID CLIENT: 15108

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		-	
PCB-1016	ND	С	2.1
PCB-1242	ND	С	2.1
PCB-1254	4.5		2.1
PCB-1221	ND	С	2.1
PCB-1232	ND	С	2.1
PCB-1248	ND	С	2.1
PCB-1260	ND	C	2.1

QUALIFIERS: C = COMMENT DETECTED DETEC

Ecology and Environment, Inc. Analytical Services Center

: TAT- CHICAGO CLIENT

RESULTS IN DRY WEIGHT %SOLIDS : 94 % TEST NAME : PCB-SOIL UNITS : MG/KG SAMPLE ID LAB : EE-92-35906 MATRIX : SOLID

SAMPLE ID CLIENT: 15109

SAMPLE LOCATION:

MIT
53
53
53
53
53
53
53

TEST CODE :SPCB 1 JOB NUMBER :9200.636

ELAP ID: 10486

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

RESULTS IN DRY WEIGHT %SOLIDS : 92 % TEST NAME : PCB-SOIL UNITS : MG/KG SAMPLE ID LAB : EE-92-35907 MATRIX : SOLID

SAMPLE ID CLIENT: 15110

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		_	
PCB-1016	ND		1.1
PCB-1242	ND		1.1
PCB-1254	ND		1.1
PCB-1221	ND		1.1
PCB-1232	ND		1.1
PCB-1248	ND		1.1
PCB-1260	1.	7	1.1

QUALIFIERS: C = COMMENT D = NOT DETECTED D = ESTIMATED VALUE D = ALSO PRESENT IN BLANK

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

RESULTS IN DRY WEIGHT %SOLIDS: 96 % TEST NAME : PCB-SOIL UNITS : MG/KG SAMPLE ID LAB : EE-92-35908 MATRIX : SOLID

SAMPLE ID CLIENT: 15111

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		_	
PCB-1016	ND	С	0.10
PCB-1242	ND	C	0.10
PCB-1254	ND	С	0.10
PCB-1221	ND	C	0.10
PCB-1232	ND	C	0.10
PCB-1248	ND	С	0.10
PCB-1260	ND	С	0.10

QUALIFIERS: C = COMMENT ND = NOT DETECTED

J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

RESULTS IN DRY WEIGHT %SOLIDS: 92 % UNITS : MG/KG TEST NAME : PCB-SOIL SAMPLE ID LAB : EE-92-35909 MATRIX : SOLID

SAMPLE ID CLIENT: 15112

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT.	LIMIT
		~		
PCB-1016	ND			0.087
PCB-1242	ND			0.087
PCB-1254	ND			0.087
PCB-1221	ND			0.087
PCB-1232	ND			0.087
PCB-1248	ND			0.087
PCB-1260	0.47			0.087

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

RESULTS IN DRY WEIGHT %SOLIDS : 93 % TEST NAME : PCB-SOIL UNITS : MG/KG SAMPLE ID LAB : EE-92-35910 MATRIX : SOLID

SAMPLE ID CLIENT: 15113

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		_	~~
PCB-1016	ND		0.54
PCB-1242	ND		0.54
PCB-1254	ND		0.54
PCB-1221	ND		0.54
PCB-1232	ND		0.54
PCB-1248	ND		0.54
PCB-1260	2.0		0.54

QUALIFIERS: C = COMMENT ND = NOT DETECTED

J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

RESULTS IN DRY WEIGHT %SOLIDS : 91 % TEST NAME : PCB-SOIL UNITS : MG/KG SAMPLE ID LAB : EE-92-35911 MATRIX : SOLID

SAMPLE ID CLIENT: 15114

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		_	
PCB-1016	ND		0.44
PCB-1242	3.0		0.44
PCB-1254	3.2		0.44
PCB-1221	ND		0.44
PCB-1232	ND		0.44
PCB-1248	ND		0.44
PCB-1260	ND		0.44

QUALIFIERS: C = COMMENT DETECTED DETEC

Ecology and Environment, Inc. Analytical Services Center

: TAT- CHICAGO CLIENT

%SOLIDS : 90 % RESULTS IN DRY WEIGHT UNITS : MG/KG TEST NAME : PCB-SOIL SAMPLE ID LAB : EE-92-35912 MATRIX : SOLID

SAMPLE ID CLIENT: 15115

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		_	
PCB-1016	ND		0.44
PCB-1242	0.72		0.44
PCB-1254	ND		0.44
PCB-1221	ND		0.44
PCB-1232	ND		0.44
PCB-1248	ND		0.44
PCB-1260	2.8		0.44

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

%SOLIDS: 89 % RESULTS IN DRY WEIGHT UNITS : MG/KG TEST NAME : PCB-SOIL MATRIX : SOLID SAMPLE ID LAB : EE-92-35913

SAMPLE ID CLIENT: 15116

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		_	
PCB-1016	ND		0.45
PCB-1242	ND		0.45
PCB-1254	ND		0.45
PCB-1221	ND		0.45
PCB-1232	ND		0.45
PCB-1248	ND		0.45
PCB-1260	1.6		0.45

QUALIFIERS: C = COMMENT DETECTED DETEC

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

RESULTS IN DRY WEIGHT %SOLIDS : 89 % TEST NAME : PCB-SOIL UNITS : MG/KG SAMPLE ID LAB : EE-92-35914 MATRIX : SOLID

SAMPLE ID CLIENT: 15117

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		-	
PCB-1016	ND	С	11
PCB-1242	ND	С	11
PCB-1254	ND	С	11
PCB-1221	ND	C	11
PCB-1232	ND	C	11
PCB-1248	ND	C	11
PCB-1260	ND	C	11

QUALIFIERS: C = COMMENT DETECTED DETEC

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

RESULTS IN DRY WEIGHT %SOLIDS : 90 % TEST NAME : PCB-SOIL UNITS : MG/KG SAMPLE ID LAB : EE-92-35915 MATRIX : SOLID

SAMPLE ID CLIENT: 15118

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		-	
PCB-1016	ND		1.1
PCB-1242	ND		1.1
PCB-1254	ND		1.1
PCB-1221	ND		1.1
PCB-1232	ND		1.1
PCB-1248	ND		1.1
PCB-1260	1.8		1.1

QUALIFIERS: C = COMMENT ND = NOT DETECTED

J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

RESULTS IN DRY WEIGHT %SOLIDS : 91 % TEST NAME : PCB-SOIL UNITS : MG/KG SAMPLE ID LAB : EE-92-35916 MATRIX : SOLID

SAMPLE ID CLIENT: 15119

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		_	
PCB-1016	ND		2.2
PCB-1242	ND		2.2
PCB-1254	11		2.2
PCB-1221	ND		2.2
PCB-1232	ND		2.2
PCB-1248	ND		2.2
PCB-1260	ND		2.2

QUALIFIERS: C = COMMENT DETECTED DETEC

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

RESULTS IN DRY WEIGHT %SOLIDS : 90 % TEST NAME : PCB-SOIL UNITS : MG/KG SAMPLE ID LAB : EE-92-35917 MATRIX : SOLID

SAMPLE ID CLIENT: 15120

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		_	
PCB-1016	ND		0.11
PCB-1242	ND		0.11
PCB-1254	0.31		0.11
PCB-1221	ND		0.11
PCB-1232	ND		0.11
PCB-1248	ND		0.11
PCB-1260	ND		0.11

TEST CODE : SPCB 1 JOB NUMBER :9200.636

ELAP ID : 10486

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

RESULTS IN DRY WEIGHT %SOLIDS: 85 % TEST NAME : PCB-SOIL UNITS : MG/KG SAMPLE ID LAB : EE-92-35918 MATRIX : SOLID

SAMPLE ID CLIENT: 15121

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT.	LIMIT
		~		
PCB-1016	ND			0.59
PCB-1242	ND			0.59
PCB-1254	ND			0.59
PCB-1221	ND			0.59
PCB-1232	ND			0.59
PCB-1248	ND			0.59
PCB-1260	2.2	•		0.59

QUALIFIERS: C = COMMENT DETECTED DETEC

Ecology and Environment, Inc. Analytical Services Center

: TAT- CHICAGO CLIENT

UNITS : MG/KG TEST NAME : PCB-SOIL SAMPLE ID LAB : METHOD BLANK 615 MATRIX : SOLID

SAMPLE LOCATION:

PARAMETER	RESULTS	Q	QNT. LIMIT
		-	
PCB-1016	ND		0.02
PCB-1242	ND		0.02
PCB-1254	ND		0.02
PCB-1221	ND		0.02
PCB-1232	ND		0.02
PCB-1248	ND		0.02
PCB-1260	ND		0.02

QUALIFIERS: C = COMMENT DETECTED DETEC

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO

UNITS : MG/KG TEST NAME : PCB-SOIL SAMPLE ID LAB : METHOD BLANK 616 MATRIX : SOLID

SAMPLE LOCATION :

PARAMETER	RESULTS	Q	QNT.	LIMIT
		-		
PCB-1016	ND			0.02
PCB-1242	ND			0.02
PCB-1254	ND			0.02
PCB-1221	ND			0.02
PCB-1232	ND			0.02
PCB-1248	ND			0.02
PCB-1260	ND			0.02

QUALIFIERS: C = COMMENT DETECTED DETEC

Ecology and Environment, Inc. Analytical Services Center

CLIENT : TAT- CHICAGO TEST NAME : PCB-SOIL UNITS : MG/KG SAMPLE ID LAB : METHOD BLANK 617 MATRIX : SOLID

SAMPLE LOCATION:

RESULTS	Q	QNT. LIMIT
	_	
ND		0.02
	ND ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND

QUALIFIERS: C = COMMENT ND = NOT DETECTED

J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK